

REMARKS

By this amendment, Applicants have amended the claims to more clearly define their invention. In particular, Applicants have amended claim 5 to be in independent form by including therein all of the limitations previously recited in claim 1, from which claim 5 previously depended. Claim 5 has also been amended to improve its format and to recite that the mineral fillers are selected to adsorb and to trap an amount of hydrocarbons discharged through the polymer so as reduce the permeability of the composition to prevent hydrocarbons from passing completely through the wall. See, e.g., page 4, lines 19-21 of Applicants' specification. Claims 1 and 13-20 have been canceled without prejudice or disclaimer, and the remaining claims amended to ultimately depend from and be consistent with claim 5. Claims 3, 4, 6, 10 and 11 have been amended to eliminate the indefiniteness problems therein noted by the Examiner. Claims 8 and 9 have been amended to be more clearly directed to a tank for a motor vehicle and a fuel line for a motor vehicle, respectively. Applicants have also added claims 21-23 to recite certain limitations deleted from claims 3, 4 and 6, respectively.

In view of the foregoing amendments to claims 3, 4, 6, 10 and 11, it is submitted these claims comply with the requirements of 35 U.S.C. 112, second paragraph. Therefore, reconsideration and withdrawal of the rejection of these claims under 35 U.S.C. 112, second paragraph, in numbered sections 1-5 of the Office Action are requested.

In view of the foregoing amendments to claims 8 and 9, reconsideration and withdrawal of the rejections of these claims under 35 U.S.C. 112, second paragraph, and 35 U.S.C. 101 in numbered sections 6-8 of the Office Action are requested.

Claims 1-3, 5, 10, 13 and 14 stand rejected under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Patent No. 6,117,328 to Sikdar et al. Applicants traverse this rejection and request reconsideration thereof.

The present invention relates to a structure for containing hydrocarbons comprising a wall comprising a single layer of a controlled hydrocarbon permeability composition, and to a tank for a motor vehicle and a fuel line for a motor vehicle comprising such a structure. The controlled hydrocarbon permeability composition comprises a mixture of polymer material and fillers. The fillers are mineral fillers and are selected to adsorb and to trap an amount of hydrocarbons discharged through the polymer so as to reduce the permeability of the composition to prevent hydrocarbons from passing completely through the wall.

The patent to Sikdar et al. discloses a pervaporation membrane used for removing volatile organic compounds from wastewaters. As noted at column 1, lines 18-23 of Sikdar et al., pervaporation is a method for removing, concentrating and recovering substances from a liquid by sorbing in a pervaporation membrane the component to be removed, followed by diffusion and evaporation of the component or components to the other side of the membrane followed by condensation. The pervaporation membrane in Sikdar et al. is prepared by dispersing at least one hydrophobic adsorbent such as activated carbon uniformly into a polymer matrix.

Thus, the Sikdar et al. patent does not disclose a structure such as that presently claimed, including mineral fillers selected to adsorb and to trap an amount of hydrocarbons discharged through the polymer so as to reduce the permeability to prevent hydrocarbons from passing completely through the wall. Rather, in Sikdar et al., since the membrane is used for pervaporation, it appears necessary for

components or components to diffuse through the membrane. Therefore, the Sikdar et al. patent does not anticipate the presently claimed invention.

Claims 1, 4-9, 12 and 15-20 stand rejected under 35 U.S.C. 102(b) as allegedly being anticipated by European patent application publication number 1108598 A2 to Ellis. Applicants traverse this rejection and request reconsideration thereof.

EP '598 to Ellis discloses a permeation barrier fuel tank for a vehicle that includes a shell 12 having a wall formed from a plurality of layers. The layers include at least an inner layer 30, an outer layer 34 and a fuel permeation barrier layer 32 disposed between the inner layer 30 and the outer layer 34 and being made of a nanocomposite polymer. The nanocomposite polymer is a polymer material in which a small quantity of a "platy filler material" has been uniformly dispersed. See, paragraph 0014 of EP '598. As disclosed in paragraph 0016 of EP '598, the "platy filler material" presents an efficient obstacle to the transport, i.e., diffusion, of penetrant molecules, such as those normally found in fuels. On the other hand, the mineral filler in the structure of the present invention is selected to adsorb and to trap an amount of hydrocarbons discharged through the inner layer. EP '598 does not disclose that the platy filler material is a mineral filler nor does it disclose that the platy filler material is selected to adsorb and to trap an amount of hydrocarbons. Rather than disclosing that the platy filler material adsorbs and traps hydrocarbons, EP '598 discloses that the platy filler material presents an efficient obstacle to the transport of molecules found in fuel. EP '598 does not disclose and would not have rendered obvious the presently claimed invention.

Claim 11 stands rejected under 35 U.S.C. 103(a) as being unpatentable over EP '598 and Sikdar et al. Applicants traverse this rejection and request reconsideration thereof.

Since the object of EP '598 is to provide a permeation barrier layer, while the object of pervaporation in Sikdar et al. is to diffuse a component or components to the other side of the membrane, there would have been absolutely no reason to modify the teachings of EP '598 with those of Sikdar et al. Thus, there would of have been no reason to use activated carbon or zeolite, the absorbing component in Sikdar et al., in the permeation barrier fuel tank of EP '598.

Accordingly, claim 11 is patentable over the proposed combination of references.

Applicants note the Examiner has cited a number of documents as being pertinent to applicants' disclosure. However, since none of these documents has been applied in rejecting the claims formerly in the application, further discussion of these documents is deemed unnecessary.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of all of the claims now in the application are requested.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 612.44505X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

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